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OBJECTIVES: the objective of the project is to evaluate the impact of health care resources and the related health care costs in relation to outcomes occurred in 10 years on the cohort of 2002 and intervention on secondary prevention cohort 2010 with a follow-up to 3 years. **METHODS:** from 2000 and 2012, Local HealthCare Unit (ASLn°1) of Milan identified a cohort of 26.062 patients with RCV (Cardiovascular risk). Data analysis was done trough a retrospective claims data study from ASLn°1 of Milan; Physicians who participated were 494. Information has been collected for inclusion in the study regarding some risk factors and treatment. At the end of 2012 reduced the effects of smoking and BMI after ad hoc training events for physicians. **RESULTS:** 12,000 subjects were recruited and followed for 3 years with reduction of spending on the NHS system and reduced incidence of events. A resources utilization analysis has been developed using profiles of treatments and dividing the population into groups with homogeneous treatment (smoking and BMI control vs. standard care), verifying the occurrence of greater outcomes and related health care costs. Data are analyzed with the definition of major cardiovascular events, all-cause mortality and cause-specific, occurrence of diabetes and other chronic greater diseases, verifying the occurrence of greater outcomes and related health care costs. 60% of population were >65 years, 63% were males. Average for paper of the risk is 3 for patients over 65 years. The average score is different between males and females (4 males and 2 females). **CONCLUSIONS:** administrative databases offer low-cost information (since they are already available) regarding more or less all services provided in a healthcare environment. These sources and their integration are a powerful tool supporting conventional methods used in epidemiological studies and as tools for plan Healthcare policy.

PCV171

DISEASE MAPPING AND SPATIAL-TEMPORAL ANALYSIS OF HOSPITAL ADMISSIONS DUE TO HEART FAILURE IN PORTUGAL

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OBJECTIVES: Heart failure (HF) is a major reason for hospital admissions (HA), with a high socio-economic impact. Therefore it is of utmost importance to understand how HA due to HF are evolving. This study aimed to build a predictive model for the annual number of HA due to HF in Portugal. **METHODS:** Hospital admissions due to HF, between 2003 and 2012, were extracted from National Diagnosis-related group database. Demographic and socioeconomic data were collected per district, from Statistics Portugal. Generalized linear mixed-effects models (GLMM) were used to estimate the annual number of HA. Spatial heterogeneity was corrected by considering region-related independent variables (IV): proportion of population aged ≥65, average monthly income and hospital access. Random effects were considered for all IV. **RESULTS:** The fixed effect estimates indicate that, in average, the number of HA due to HF increase by 12.4% per year. An increase of 1% in the proportion of population aged ≥65 accounts for an increase of 3% in HA. The increase of 100€ in the monthly income represents an average decrease of 22.5% in HA. By its turn, 1 more hospital per 100,000 inhabitants accounts for an increase of 5.3% in HA. These changes are conditional to all the other IV remaining unchanged. Estimated random effects accounted for spatial heterogeneity by introducing corrections around the fixed effects. The fitted model was compared to a GLMM without random effects for the region-related IV and a fixed effects model. Mean absolute deviations (MAD), used to assess goodness of fit, were 34.8, 56.4 and 131, respectively. Graphical representation also demonstrated that our model fitted better. Predictive ability of the model was assessed by MAD of forecast for 2012 based on 2003-2011 data (MAD=77.2). **CONCLUSIONS:** Although this approach produced good results, the predictive ability could be further improved by the inclusion of other region-related variables.

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PHARMACOECONOMIC ANALYSIS OF THE COMBINED HOMOCYSTEINE-LOWERING AND STANDARD THERAPY VERSUS STANDARD THERAPY OF PATIENTS WITH CHD, POSTPERCUTANEOUS CORONARY INTERVENTION (PCI) AND B12 DEFICIENCY

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OBJECTIVES: Reasonability of vitamins B6, B12and folic acid (FA) for the prevention of cardiovascular complications in patients with coronary heart disease (CHD) is debated. The aim of the study is to assess the cost effectiveness of homocysteine-lowering and standard therapy versus standard therapy in patients with CHD. **METHODS:** Results of the clinical randomized trial [O. O. Shakhmatova, A. Komarov, A. N. Samko et al. / Rational Pharmacotherapy in Cardiology, 2011; 7(2), 524-35]. Cost-effectiveness analysis of homocysteine-lowering therapy by vitamins B6, B12and FA combined with the standard therapy versus the standard therapy (antiplatelet, statin, antihypertensive drugs: ACE inhibitors, beta-blockers) in patients with CHD and postPCI, with the elevated level of homocysteine affected by cyanocobalamin deficiency. The first level of costs, i.e. the cost of treatment, was taken into account. **RESULTS:** Two treatment regimens were analyzed: the first regimen "vitamins + standard": patients (n=97) of which since the randomization received FA (0.6 mg/day), vitamin B6 (4 mg/day) and vitamin B12 (10 μg/day) along with the standard treatment. Patients in the control group (n=167) received only standard therapy. The observation period was 20 months. The first regimen "vitamins + standard" contributed to reduction of the total combined outcome: cardiovascular death, acute coronary syndrome, stroke, revascularization by 95.0%, standard therapy – by 65.7%. The costs amounted to € 371 for the regimen "vitamins + standard" and € 271 for the standard therapy, respectively. The "cost-effectiveness" ratio have showed that the treatment regimen "vitamins + standard" is more cost effective, its use compared to the standard therapy requires additional expenses in the amount of € 307.17 for 1 additional prevented event that did not occurred. **CONCLUSIONS:** Homocysteine-lowering therapy combined with the standard therapy of patients with CHD with B12 deficiency is clinically more effective and more cost effective compared to the standard therapy.

PCV173

ARE SPANISH REGIONS IMPLEMENTING THE NATIONAL THERAPEUTIC POSITIONING REPORT (TPR) REGARDING NEW ORAL ANTICOAGULANTS (NOAC) IN THE SAME WAY? A CASE OF REGIONAL VARIABILITY IN DRUG ACCESS

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OBJECTIVES: As Other EU countries Spain is a decentralized health care system, and some measurements were implemented to ensure equity in the system. The Therapeutic Positioning Report is a new procedure set up by the Spanish Agency of Medicines (AEMPS) and the Ministry of Health in May 2013 as part of the National pricing and reimbursement process for new drugs; Its aim was to reduce market access timelines and ensure a nation-wide implementation of reimbursement criteria, regional governments participated in this initiative. Our aim was to evaluate the implementation of this procedure inside the NOAC drug class. **METHODS:** We developed a structured search by collecting the official reports from the TPR at the AEMPS, and the different applications of the NOACs used in Non-Valvular Atrial Fibrillation (NVAF) among the 17 Regional Health Systems. These applications were evaluated through the different visa inspection procedures that regional governments use to approve NOAC prescriptions. We summarized this information and fed a data collection sheet developed ad hoc to show the differences between regions and compared with the National TPR. We evaluated 8 different criteria included in the National TPR for NOAC. **RESULTS:** We found regional differences among the 8 criteria identified in the NOAC TPR. Main differences were found in key aspects from patient access perspective i.e.: different clinical criteria for NOAC indication, allowance of prescription by GPs, INR control criteria to switch from traditional anticoagulants to NOAC, etc. Three different groups of regions were identified attending to the number of criteria coinciding with the TPR. **CONCLUSIONS:** There are different patterns of implementation of the TPR at regional level in Spain, leading to different access barriers that translate into patient inequities of access and differences in NOAC prescription by region.

PCV174

RELATIONSHIP BETWEEN ADHERENCE TO POST PERCUTANEOUS CORONARY INTERVENTION (PCI) GUIDELINES AND CLINICAL OUTCOMES OF POST-PCI PATIENTS IN HONG KONG - A 5-YEAR RETROSPECTIVE COHORT STUDY

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OBJECTIVES: This study aimed to investigate the relationship between post-PCI guideline adherence and 5- year clinical outcomes of post-PCI patients in Hong Kong. **METHODS:** Retrospective data and information was retrieved from the PCI registry and electronic patient record system in Prince of Wales Hospital, Hospital Authority. 2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention was chosen as reference for post-PCI recommended therapies. Total five post-PCI guideline-recommended therapies were included in analysis for the relationship with 5-year clinical outcomes, the major adverse cardiac events (MACE). **RESULTS:** Total 276 (68.3%) PCI patients completed 5-year follow-up. Forty-four (15.9%) patients experienced MACE in the 5-year period with 23 (52.3%) as cardiac death, 11 (25%) as non-fatal myocardial infraction, and 10 (22.7%) as target vascular revascularization. Only 40 (14.5%) patients fully adhered to all five guideline-recommended therapies with a mean total percentage adherence of 77.8%. Diabetes management (95.2%) was the most adherent therapy and lipid management was the least adherent therapy (40.7%). Only 64.73% of patients adhered to dual antiplatelet therapy with 89.9% and 71.0% of patients adhered to aspirin and clopidogrel respectively. Five-year total percentage adherence and dual antiplatelet therapy adherence did not significantly correlate with the 5-year clinical outcomes in post-PCI patients. However, one of the guideline-recommended therapies, the adherence to aspirin was significantly associated with reduced 5-year rates of MACE (adjusted OR 0.071, 95% CI 0.005-0.981, p =0.048) and cardiac deaths (adjusted OR 0.036, 95% CI 0.002-0.742, p =0.031). The adherence of dual antiplatelet therapy and lipid management were significant associated with reduced non-cardiac deaths (adjusted OR 0.224, 95% CI 0.072-0.700, p =0.031) and numbers of hospital admissions (adjusted beta -0.135, 95% CI -1.126 to -0.035, p =0.037) respectively. **CONCLUSIONS:** Adherence to aspirin, dual antiplatelet therapy, and lipid management were associated with better 5-year clinical outcomes in post-PCI patients.

PCV175

A MANAGEMENT VIEW ON HEALTH ECONOMICS - CASE STUDY ON NETWORK META ANALYSES (NMA) FOR PULMONARY ARTERIAL HYPERTENSION (PAH)

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OBJECTIVES: Demonstrate the need for re-opening the debate around the different treatment guidelines for Pulmonary Arterial Hypertension (PAH) by asking the question: How much money could the UK NHS potentially save if they had a clear a ranking of the different oral PAH treatments, based on their clinical effectiveness / ICER ratio? Currently the clinical effect ranking of the standard treatments does not exist; there only exists a ranking of costs related to each health technology. Once the clinical effect ranking is established, the intention of this paper is to investigate how this ranking matches/correlates with the ranking of costs and then assess it's likeky impact on the NHS spending, with the intention of making it more efficient - starting from the hypothesis that the current treatment guidelines will be followed for